



ATTACHMENT A

REMARKS

Claims 1-3, 6-9, 11-13 and 15 have been rejected under 35 USC 102(b) as being “anticipated by Sanocki et al. (US 4923332)” (“Sanocki”). This rejection is respectfully traversed particularly as applied to the claims as now amended.

Sanocki discloses a high temperature resistant floatation core and a high temperature resistant oil containing boom particularly adapted for permitting the in-situ burning of spilled or leaked oil during off-shore oil spill cleanup operations. The boom 10 includes an outer layer of polymer coated fabric 11 which is designed to melt to the waterline 16 thereby exposing the underlayers 12 and 13 to the burning oil. The first underlayer 12 is made of a knitted wire mesh. The second underlayer is made of a high temperature resistant refractory tight weave hybrid textile fabric. The first underlayer has knitted opening sizes of a predetermined density while the fabric 13, even if coated by dip coating yarn with a polymer coating, is left with the meshed interstices substantially open.

Independent claims 1 and 15 have been amended to recite, inter alia, an outer solid water impermeable elongate tubular shell member. No such member is disclosed in the Sanocki patent. The Examiner has made reference to knitted wire mesh layer 12 as being “an outer elongate tubular member” but it is clear that this underlayer of knitted wire mesh is not a solid outer water impermeable tubular shell member as now claimed. Further, none of the other “outer” layers of the Sanocki patent can be read as such a shell member. This difference represents a fundamental difference between the oil containment boom of the Sanocki patent and the barrier device of the present invention. Among other advantages, the barrier device of the present invention with its tubular shell within tubular shell construction having two internal floatation means, is very difficult to sink, i.e., this construction prevents sinking of the barrier device, even if the two shells are pierced (see, e.g., paragraph [0059] of the instant application).

In contrast, the underlayers 12 and 13 of the Sanocki patent are specifically designed to have open interstices therein and not to serve as a water impermeable barrier. Similar remarks apply to the fabric outer layer 11. Accordingly, it is respectfully submitted that the rejection of claims 1-3, 6-9, 11-13 and 15 should be withdrawn in view of the amendments made to independent claims 1 and 15.

With respect to the dependent claims, applicant respectfully disagrees with a number of the contentions of the Examiner. For example, it is not seen how “member 11” which is simply a fabric outer layer can be read as the “superstructure” claimed in claim 15 particularly as amended. In this regard, claim 15 has been amended to clarify that the superstructure is an upwardly projecting superstructure as it is believed would be understood from the word “superstructure” itself.

Claims 10, 18 and 19 have been rejected under 35 USC 103(a) as being “unpatentable over Sanocki et al. in view of Preus or Dreyer (US 4062191, 2003/0072616).” This rejection is respectfully traversed.

The Preus and Dreyer references clearly do not make up the deficiencies of the Sanocki patent as a reference against the parent claims and thus these claims are patentable for at least the reasons set forth in support of the patentability of these parent claims.

Claims 1-8 and 10-22 have been rejected under 35 USC 103(a) as being “unpatentable over Wooley et al. (US 2003/9136325) in view of Wieland (US 1004718).” This rejection is respectfully traversed.

The Wooley patent relates to barrier units used to form security barriers, e.g., for “temporarily halted ships.” The units themselves are formed by stacked tubular members 12. In some embodiments, all of the tubular members are filled with a buoyant material while in other embodiments only some of the tubular members are so filled.

The Wieland patent, which issued in 1911, discloses a “floating structure” or casing 1, which in the basic embodiment, is “preferably made of planking in a cylindrical form held together by suitable iron bands or hoops 2” and including a central compartment which “may be divided by a deck 20 so that the under side may be used for ballast and the upper half for cargo space.” The Wieland structure also includes a working deck or platform 17, and, in general, is clearly a completely different kind of structure from that of the Wooley patent.

It is respectfully submitted that given the actual teachings of the two references, the combination proposed by the Examiner is clearly an artificial one. In this regard, it is respectfully submitted that it would not be obvious to incorporate features of the Wieland patent, relating to creating a cargo space in an entirely different kind of structure, into the simple tubular members of the barrier unit of the Wooley reference. Further, there is no teaching of a floatation material in the “cargo space” cavity of the Wieland patent which is intended to hold cargo and

includes a separate deck, as indicated above. Accordingly, it is respectfully submitted that the present invention as claimed in claims 1-8 and 10-22 is clearly patentable over the Wooley et al and Wieland patents.

Claim 23 has been rejected under 35 USC 103(a) as being “unpatentable over Wooley et al. in view of Weiland as applied to claim 21 above, and further in view of Kasai et al. (US 4,174,186).” This rejection is respectfully traversed.

Claim 23 is generally directed to the embodiment of Figure 8 and depends from claim 21 which recites that a pair of the claimed floatation devices form a barrier unit, that a plurality of such barrier units are provided, and that the barrier units are connected together in end to end relationship wherein at least one floatation device of one barrier unit is connected to at least one floatation device of a further barrier unit. Claim 23 further recites that the barrier units are connected together end to end by a cable interconnecting a further said floatation unit of said one barrier unit and a further said floatation device of said further barrier unit. Thus, while the Examiner may be correct in stating that the use of a cable in connecting barrier units together is conventional, the specific arrangement disclosed in claim 23 is clearly patentable over the teachings of the references relied on. Similar remarks apply to claim 22 which is directed to the embodiment of Figure 7 and provides that the barrier units are “further connected together end to end by a further said floatation device.”

Finally, claim 24 has been rejected under 35 USC 103(a) as being “unpatentable over Wooley et al in view of Weiland as applied to claim 19 above, and further in view of Good (US 6602103).” This rejection is respectfully traversed.

First, claim 24 is patentable for at least the reasons given in support of the patentability of parent claim 19. Moreover, claim 24 has been amended to recite that the connector means further comprises first and second shackles respectively provided on the adjacent floatation devices and a link connector interconnecting the shackles. This arrangement clearly defines over the connector of the Good patent.

Allowance of the application in its present form is respectfully solicited.

END REMARKS